HOWAGE A

MANUFACTURERS OF PORTLAND CEMENTS

General Offices Humboldt, Kansas

5200 PARK AVENUE DES, MOINES, IOWA 50321

MATERIAL SAFETY DATA SHEET

Section I

- The Monarch Cement Company 5200 Park Avenue Des Moines, Iova 50321
- 2. Emergency telephone number 515-243-3277
- Chemical name and synonyms Not applicable
- 4. Trade name and synonyms Masonry Cement
- 5. Chemical family Calcium salts
- 6. Formulae 3CaO·SiO₂ (CAS #12168-85-3)

2CaO·SiO₂ (CAS #10034-77-2)

3CaO-A1₂O₃ (CAS #12042-78-3)

4CaO·Al₂O₃·Fe₂O₃ (CAS #12068-35-8)

CaSO-2H₂O (CAS #13397-24-5)

Limestone (CAS #1317-65-3)

plus traces of CaO, ${\rm MgO}$, ${\rm K_2SO_4}$, ${\rm Na_2SO_4}$, fatty acids and pine resin

Section II - Hazardous Ingredients

7. N. A.

Section III - Physical Data

- 8. Boiling point N. A.
- 9. Vapor pressure N. A.
- 10. Vapor density N. A.
- 11. Solubility in water Slight (0.1 1%)
- 12. Specific gravity 2.90
- 13. Percentage volatile by volume N. A.

- 14. Evaporation rate N. A.
- 15. Appearance and odor Gray (or white) powder; odorless.

Section IV - Fire and Explosion Hazard Data

- 16. Flash point N. A.
- 17. Flammable or explosive limits N. A.
- 18. Extinguishing media N. A.
- 19. Special firefighting procedures N. A.
- 20. Unusual fire and explosion hazards None.

Section V - Health Hazard Data

- 21. Threshold Limit Value -
- 5 mg m^{-3} (respirable dust)
- 10 mg m^{-3} (total dust)
- 30 million particles per cubic foot
- 22. Effects of overexposure
 - Acute Wet cement, especially as an ingredient in plastic (unhardened) concrete, can dry the skin and cause alkali burns. Cement dust can irritate the eyes and upper respiratory system.
 - Chronic Cement dust can cause inflammation of the lining tissue of the interior of the nose and inflammation of the cornea. Hypersensitive individuals may develop an allergic dermatitis. (Masonry may contain traces of hexavalent chronium.)
- 23. Emergency and first-aid procedures Irrigate eyes with water. Wash affected areas of the body with soap and water.

Section VI - Reactivity Data

- 24. Stability Product is stable. Although no hazardous reaction will occur, Masonry cement should be kept dry until used.
- 25. Incompatibility None
- 26. Hazardous decomposition products None
- 27. Hazardous polymerization Will not occur.

Section VII - Sill Procedures

- 28. Steps to be taken in case material is spilled Use dry cleanup methods that do not disperse the dust into the air. Avoid breathing the dust.
- 29. Waste disposal method Material can be disposed of as common waste.

Section VIII - Special Protection Information

- 30. Respiratory protection In dusty environments, the use of a NIOSH approved respirator is recommended.
- 31. Ventilation Local exhaust can be used, if necessary, to control airborn dust levels.
- 32. Eye protection In dusty environments, the use of tight-fitting goggles is recommended.
- 33. Skin protection Use barrier creams, gloves, boots and clothing to protect the skin from prolonged contact with wet cement, especially in plastic concrete. Immediately after working with cement, workers should shower with soap and water. Precautions must be observed because cement burns occur with little warning --little heat is sensed.

Section IX - Special Precautions

- 34. Precautions to be taken in handling and storing None
- 35. Other precautions None.